

ABSTRACT

A protective element with improved spherical segmentation performance during the melting of a low-melting metal member, has a heat-generating member and a low-melting metal member on a substrate, in which the low-melting metal member is heated and blown out by the heat generated by the heat-generating member. There is a region in which the low-melting metal member is suspended over the underlying base (such as an insulating layer), and when  $S$  ( $\mu\text{m}^2$ ) is the surface area of a lateral cross section of the low-melting metal member 4 between a pair of low-melting metal member electrodes 3a and 3b or 3b and 3c sandwiching the region, and  $H$  ( $\mu\text{m}$ ) is the height at which the suspended region is suspended, then the relationship  $H/S \geq 5 \times 10^{-5}$  is satisfied. It is preferable here that the upper surfaces of both of the pair of low-melting metal member electrodes protrude beyond the upper surface of the underlying insulating layer. Alternatively, it is preferable that there is a height differential between the upper surfaces of the pair of low-melting metal member electrodes, and the low-melting metal member is inclined between the pair of low-melting metal member electrodes.